

## **ABSTRACT OF THE DISCLOSURE**

49. B-cell, T-cell, myeloid-cell, mast-cell, and plasma-cell disorders are significant contributors to illness and mortality in domestic animals, especially in companion animals such as dogs and cats. These disorders include both autoimmune disorders and malignancies, such as the B-cell subtype of non-Hodgkin's lymphoma, acute and chronic lymphocytic or myeloid leukemias, multiple myeloma, and mastocytomas. Antibody components that bind with B-cell or T-cell antigens or epitopes, as well as antigens or epitopes of myeloid, plasma and mast cells provide an effective means to treat these disorders in domestic animals. The immunotherapy uses naked antibodies, immunoconjugates and fusion proteins, alone or in combination with standard therapeutic regimens.